DEPARTMENT OF THE ARMY CORPS OF ENGINEERS
OFFICE OF THE CHIEF OF ENGINEERS

DETAILED STATEMENT
OF
MAJOR GENERAL ROBERT H. GRIFFIN
DIRECTOR OF CIVIL WORKS
ON THE REMAINING ITEMS OF THE FISCAL YEAR 2004
CIVIL WORKS BUDGET

PRESENTED BEFORE THE SUBCOMMITTEE ON
ENERGY AND WATER DEVELOPMENT
COMMITTEE ON APPROPRIATIONS
OF THE HOUSE OF REPRESENTATIVES

March 26, 2003

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INTRODUCTION

Mr. Chairman and members of the Subcommittee, I am honored to testify before you as Director of Civil Works.

I would like to note some highlights of the Fiscal Year (FY) 2004 budget for Remaining Items, which include the Army Corps of Engineers (Corps) nationwide programs and activities. These include the General Expenses appropriation, which provides for executive direction and management of the Civil Works program at the Corps Headquarters and the Division Offices.

ACTIVITIES UNDER THE GENERAL INVESTIGATIONS APPROPRIATION

SPECIAL STUDIES

National Shoreline. The budget includes the special study for FY 2004. The National Shoreline study is an interagency effort to determine the extent and cause of shoreline erosion on all the coasts of the United States and to assess the economic and environmental impacts of that erosion. The study will analyze the appropriate levels of Federal and non-Federal participation and the advisability of using a systems approach to sediment management for linking the management of all projects in the coastal zone so as to conserve and efficiently manage the flow of sediment within littoral systems.

Ex Post Facto. The budget also includes the special study effort for FY 2004, Ex Post Facto Benefit-Cost Studies of 15 to 25 completed projects. The purpose of this study is to

estimate benefit to cost ratios for projects as they were built and as the actual project outputs and services were delivered and to apply lessons learned to improve our current learning process.

Independent Review. The activities of this program are to design and implement a review process that assures the proper level of review in accordance with the scope and complexity of the studies; to identify and secure a pool of highly qualified experts in each area of analysis to conduct the reviews; to facilitate the review; and to facilitate the resolution of issues and concerns identified during the review process.

COORDINATION WITH OTHER FEDERAL AGENCIES, STATES, AND NON-FEDERAL INTERESTS

The budget for Coordination with Other Federal Agencies, States, and Non-Federal Interests is $10.9 million. Following is a comparison of the FY 2003 appropriation and the FY 2004 budget for activities under this program.

Activity	FY 2004 Budget
Planning Assistance to States	6,000,000
Special Investigations	2,200,000
Gulf of Mexico Program	100,000
Chesapeake Bay Program	100,000
Pacific Northwest Forest Case Study	100,000
Interagency Water Resources Development	1,100,000
Interagency and International Support	150,000
Inventory of Dams	300,000
National Estuary Program	100,000
North American Waterfowl Management Plan	100,000
Estuary Habitat Restoration Program	100,000
Coordination with Other Water Resources	300,000
CALFED	100,000
Lake Tahoe	100,000

Estuary Programs. The budget is $100,000 to continue cooperation with Federal and State agencies in the U.S. Environmental Protection Agency's National Estuary Program. In addition, the budget is $100,000 for the Estuary Habitat Restoration Program. Funds for this

initiative would be utilized to support the interagency council established in the Estuary Restoration Act of 2000. The council has responsibilities to develop a national strategy for restoration of estuary habitat and soliciting, reviewing and evaluating project proposals.

Planning Assistance to States. The budget of $6 million is a major portion of the Coordination with Other Federal Agencies, States, and Non-Federal Interests program. The FY 2004 budget would enable the Corps to provide much needed planning and technical assistance for a variety of water resource efforts to states, territories, and Federally recognized Indian Tribes. The assistance is in the form of 50% Federal, 50% non-Federal cost-shared reconnaissance level studies which provide information and guidance to help the non-Federal sponsors become more active and effective working partners with the Federal government in resolving water resource problems. The studies may address a wide variety of water resource issues including environmental conservation/restoration, wetlands evaluation, flood damage reduction, coastal zone management, and dam safety. In fiscal year 2001, 160 studies were performed for 43 states, as well as seven studies for Federally-recognized Indian tribes.

Special Investigations. Another major portion of the FY 2004 budget is $2.2 million for Special Investigations. This program provides for the increasing interests in Corps capabilities and the continued growth in requests for investigations of nominal scope. The activities of this program include: special investigations and reports of nominal scope prepared pursuant to Congressional and other requests from outside the Corps of Engineers for information relative to projects or activities which have no funds; review of reports and environmental impact statements of other agencies; and review of applications referred to us by the Federal Energy Regulatory Commission for permits or licenses for non-Federal hydropower developments at, or affecting, Corps water resource projects.

Interagency Water Resources Development. The budget is $1.1 million to conduct district activities, not otherwise funded, which require coordination effort with non-Federal interests. These activities include items such as meeting with City, County, and State officials to help solve water resources problems or to determine whether Corps programs are available and may be used to address the problems. This budget also provides $200,000 for two American Heritage River Navigators who are supported by the Corps of Engineers. These River Navigators provide direct support to the Community Partners for the New River, which flows through NC, VA, and WV; and for the Upper Mississippi River above St. Louis, MO.

Gulf of Mexico Program. The budget of $100,000 allows the Corps to continue involvement in this U.S. Environmental Protection Agency (EPA)-initiated program, which blends programs and resources of Federal, state, and local governments with the resources and

commitments of business, industry, citizens groups and academia. The Gulf of Mexico Program is formulating and implementing creative solutions to economic and environmental issues with Gulf-wide and national implications. Hypoxia/nutrient enrichment and nonindigenous species are focus areas, which are linked to authorized Corps missions in the five-state program area.

Chesapeake Bay Program. The budget of $100,000 enables the Corps to continue participation in the EPA-initiated interagency program for the protection and restoration of the bay's natural resources. These natural resources have tremendous environmental and economic significance to the northeast region and to the Nation.

Pacific Northwest Forest Case Study. The budget of $100,000 is for the Corps to continue participation in the interagency program initiated by the White House's Council of Environmental Quality for ecosystem management of the public lands in the Pacific Northwest within the range of the Northern Spotted Owl.

Interagency and International Support. The $150,000 budget allows the Corps of Engineers to participate with other Federal agencies and international organizations to address problems of national significance to the United States. The Corps of Engineers has widely recognized expertise and experience in water resources, infrastructure planning and development, and environmental protection and restoration. In FY 2002 and 2003, program funding included support to the State Department on Middle East and African infrastructure and water issues, the World Water Council, and the National Park Service and Environmental Protection Agency on homeland security.

Inventory of Dams. The $300,000 budget is for the continued maintenance and publication of the National Dam Inventory. This ongoing inventory maintenance and publishing effort is a coordinated effort involving data for the Federal and non-Federal Dam Safety community in cooperation with the Interagency Committee of Dam Safety. This inventory is now required for use by the Director of Federal Emergency Management Agency (FEMA) and the National Dam Safety Review Board in the allocation of dam safety program assistance funds to the various States.

CALFED. The budget of $100,000 allows the Corps to continue to play a role in the CALFED Bay-Delta process in FY 2004. The CALFED Bay-Delta Program is a three-phased solution process for the development of a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system. This program is a joint effort between local land management agencies, the state of California, and the Federal government.

Lake Tahoe. The budget of $100,000 is to allow the Corps to continue the coordination efforts to protect the natural, recreational and ecological resources in the Lake Tahoe Region associated with the Presidential Executive Order "Federal Actions in the Lake Tahoe Region".

The budget is $300,000 for Coordination with Other Water Resource Agencies, including the Department of Agriculture and Regional Planning Commissions and Committees, and $100,000 to continue cooperation with Federal and state agencies and non-Federal interests in support of the North America Waterfowl Management Plan administered by the U.S. Fish and Wildlife Service.

COLLECTION AND STUDY OF BASIC DATA

The FY 2004 budget for Collection and Study of Basic Data activities is $13.25 million. Following is a comparison of the FY 2003 appropriation and the FY 2004 budget for activities under this program:

Activity	**FY 2004 Budget**
Flood Plain Management Services	7,500,000
Stream Gaging (U S Geological Survey)	500,000
Precipitation Studies (National Weather Service)	300,000
International Water Studies	400,000
Hydrologic Studies	400,000
Scientific and Technical Information Centers	100,000
Coastal Field Data Collection	2,500,000
Transportation Systems	500,000
Environmental Data Studies	100,000
Remote Sensing/Geographic Information System Support	200,000
Automated Information System Support –Tri-Service CADD/GIS Technology Center	450,000
Flood Damage Data	300,000

Flood Plain Management Services. The largest portion of the Collection and Study of Basic Data program FY 2004 budget is $7.5 million for the Flood Plain Management Services

program. This program continues to be one of the most prevalent non-project services that the Corps provides for Federally recognized Indian Tribes, states, and local governments. By working together with state, local, and tribal land management decision makers, we are able to alert them to various flood hazards, promote prudent use of the flood plains, and help mitigate future losses to life and property. The active involvement of land management decision makers is the key to sound flood plain management in the United States. Significant flood events over the past several years have raised public awareness and increased the demand for information and assistance for mitigating flood losses. The funding will provide flood plain management services to state, regional, local governments, Indian Tribes, and other non-Federal public agencies who, in turn, invest their own funds to avoid flood hazards and make good use of the flood plains. This not only mitigates future losses to life and property but also reduces the need for costly Federal flood control works as well as the demand for other Federal, state, and local services such as providing major disaster assistance before, during, and after floods. Under this program, we also participate with the FEMA, the National Weather Service, and local governments in conducting critical pre-disaster hurricane evacuation and preparedness studies for mobilizing local community responsiveness to natural disasters in high hazard coastal areas of states and counties along the Atlantic Ocean and the Gulf of Mexico.

Coastal Field Data Collection. The FY 2004 budget for this activity is $2.5 million to systematically acquire and assemble long-term baseline data for coastal regions. These data are necessary for adequate assessment of technical, economic, and environmental feasibility for a variety of Corps projects, including projects for coastal navigation, storm damage reduction, and mitigation of harbor entrance impacts on adjacent shores. Cost-effective mission accomplishment requires long-term and system/regional data that encompass winds, waves, currents, water levels, bottom configuration, sediment characteristics, and geomorphology. With 800 navigation projects to maintain and repair (25% are more than 50-years old), the costs attributable to having no data or poor data would be significant. Data to be collected either are unavailable in existing archives, are of uncertain or poor quality, or are too sparsely distributed temporally and/or spatially to have statistical value. The required data are regional in nature and not properly chargeable to authorized projects. It also takes many years of data to establish a statistically significant baseline to use in project studies. The value of program data and project-related data is maximized through the use of Corps-wide standards, routine updating of available data, utilization of a centralized data library on the world wide web, and dissemination over the Internet.

Automated Information System Support - Tri-Service CADD/GIS Technology Center. The FY 2004 budget of $450,000 for the Tri-Service CADD/GIS Technology Center represents the Civil Works share of the total $3.341 million required to operate and maintain this important

center of expertise. The bulk of the remainder of the total requirement is provided by OMA, the Navy, the Air Force, and the Marines, in accordance with a 1992 agreement, establishing a Tri-Service center in order to minimize duplication of effort of the services. All phases of Corps work, including planning, real estate, design, construction, operations, maintenance and readiness benefit from CADD/GIS technologies.

Scientific and Technical Information Centers. Public Law 99-802, Federal Technology Transfer Act of 1986, requires technology transfer from Federal agencies to the private sector. The FY 2004 budget will be utilized to acquire, examine, evaluate, summarize, and disseminate newly published scientific and technical information generated within the Corps and other activities within the U.S. and abroad.

Flood Damage Data Collection. The FY 2004 budget includes $ 300,000 to continue a program to improve the technical accuracy and quality of flood damage data including the relationship of flood characteristics to property damage. This program facilitates the timely collection of data when a damaging event occurs and the development of a national flood damage database to support local, state and Federal studies and research. Additionally, the program currently is developing generic flood damage and property valuation relationships that could be used Corps-wide. This will result in shorter, less-costly flood damage reduction studies.

RESEARCH AND DEVELOPMENT

The FY 2004 budget for Research and Development (R&D) under General Investigations is $22 million. The Civil Works R&D program is formulated to directly support the established business programs and strategic directions of the Civil Works Program including: Flood Damage Reduction, Inland and Coastal Navigation, Environment Restoration, Hydropower, Emergency Management, Water Supply and Regulatory. The Civil Works R&D requirements are primarily user driven and the effort is essentially a problem-solving process by which the Corps systematically examines new ideas, approaches, and techniques, with a view toward improving the efficiency of its planning, design, construction, operations and maintenance activities.

Results of this R&D effort are directly incorporated into practice within the Civil Works Program through the Civil Works Guidance Maintenance Program involving revisions or additions to Engineer Regulations, Engineer Manuals, Technical Guidance Manuals, Engineer Technical Letters, or Guide Specifications. Numerous other means of technology transfer are also used such as formal training courses, workshops, INTERNET and technical publications.

The Corps Civil Works R&D Program continues to provide practical end products and a high return on investment for the Corps and the Nation.

In order to most effectively use the limited R&D resources and to avoid unnecessary duplication of research effort, the Civil Works R&D Program maintains aggressive external technical exchange and technology transfer programs with other Federal agencies and state and local governments including the TVA, Bureau of Reclamation, Bonneville Power Administration, Western Power Administration, the Soil Conservation Service, EPA, the Fish and Wildlife Service, NOAA, USGS, DOT, the Navy. The Corps also participates extensively with the Transportation Research Board, the Water Science and Technology Board, the National Research Council, the National Oceanographic Partnership Program, and the Federal Acid Mine Drainage Technology Institution in coordinating and leveraging research activities.

The strategic emphases of the proposed FY 2004 GI R&D program include:

- Regional Sediment Management (RSM)
- Systems-Wide Modeling, Assessment & Restoration Technologies (SMART)
- Technologies and Operational Innovations for Urban Watershed Networks (TOWNS)
- Common Delivery Framework (CDF)
- Navigation Economic Technologies (NETS)

Improved sediment management at navigation and flood damage reduction projects offers tremendous potential for future project cost reduction. Research in this area is focused on sedimentation prediction and control techniques, optimizing channel depths and dimensions including more cost-effective deep-draft channel design criteria to safely and efficiently accommodate future international shipping requirements, reduced dredging costs, increased navigation channel safety and reliability, and increased options and opportunities for beneficial uses of dredged sediment. Close coordination will be essential between this research area and the SMART research program discussed below.

The Systems-Wide Modeling, Assessment & Restoration Technologies (SMART) Research Program addresses the Corps water resources needs at the system/watershed level. The objective of this research effort is to design state-of-the-science, user-oriented methods and procedures to restore and manage natural resources with application toward the total ecosystem/watershed. Research is also focused on environmental restoration technologies for a wide range of water resources management needs. The focus of this research enables the Corps to meet the legal requirements of the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA), while supporting critical technology needs of the major civil works business programs of Environmental Restoration, Navigation, and Flood Damage Reduction.

The Technologies and Operational Innovations for Urban Watershed Networks (TOWNS) research will include the following major thrust areas: integrated decision support tools and forecasting methodologies for use in flood damage reduction that incorporate changing urban settings, climate changes and extreme events; technologies for sustainable urban flood damage reduction (structural and non-structural); real-time surveys and system monitoring for improved condition assessment; and expedient and cost-effective flood fighting and related emergency operations.

The objective of the Common Delivery Framework (CDF) research is to develop a new framework approach to managing software guidance, capabilities and resources for model/application developers in a consistent and corporate context that enables the Corps to reduce costs for developing and applying science and technology (S&T) products. The initial work will investigate geospatial S&T development in the areas of information security, metadata, interoperability, enterprise GIS, visualization, and informatics.

The objective of the Navigation Economic Technologies (NETS) research program is to enhance and standardize evaluation tools and methods for shallow and deep draft navigation project life-cycle analysis. The NETS R&D program will develop peer-reviewed procedures and tools that will be used throughout the Corps by concentrating on the following areas: (a) expanded and improved capabilities to forecast navigation traffic in ports and on waterways; (b) improved tools and approaches to evaluate and perform calculations of transportation economic benefits and costs; (c) integration of tools and approaches for systems evaluation and management; (d) improved capabilities to integrate economic, environmental, and other factors for navigation system investment and management; (e) procedures for integrating uncertain variables within the economic evaluation of navigation; (f) extension of benefit evaluation to include congestion, air quality and other externalities; and (g) improved methods and data support for all modes of transportation of commodities from production site to ultimate consumption.

Research and Development Cross-Cut. The conference report, House Report number 102-177, accompanying the FY 1992 Energy and Water Development Appropriations Act stated the conferees' concern with the trend of spreading research related programs throughout several appropriation accounts in the Civil Works budget, and directed the Corps to work with the committees to address this issue. In response to this interest by the committees, the following table has been developed to provide a consolidated display of all Civil Works research and development activities for which there is funding in the FY 2004 budget.

ACCOUNT AND ACTIVITY	FY 2004 BUDGET
GENERAL INVESTIGATIONS	
Research and Development	22,000,000
CONSTRUCTION, GENERAL	
Aquatic Plant Control	3,000,000
Shoreline Erosion Control Development and Demonstration Program	6,000,000
OPERATION & MAINTENANCE, GENERAL	
Coastal Inlet Research	2,750,000
Dredging Operations & Environmental Research	6,755,000
Aquatic Nuisance Control Research	725,000
(formerly Zebra Mussel Control)	
GRAND TOTAL	35,230,000

ACTIVITIES UNDER THE CONSTRUCTION, GENERAL APPROPRIATION

CONTINUING AUTHORITIES

The FY 2004 budget for the nine Continuing Authorities funded under Construction, General is $64.5 million. This is a decrease of $13.5 million from the FY 2003 budget. The budget covers funding of planning, design, and construction to continue ongoing projects that provide solutions to flood control and emergency streambank erosion problems under the Section 205 and Section 14 programs, navigation problems under the Section 107 program, shoreline damage problems under the Section 103 and Section 111 programs, clearing and snagging problems under the Section 208 program, and environmental problems under Sections 204/207/933. Under our Continuing Authorities Program, projects are accomplished expeditiously and result in a high level of customer satisfaction. Continuing Authorities projects continue to be an important segment of our total water resources infrastructure investment program. No funds are requested for new starts.

INLAND WATERWAYS USERS BOARD

Funds are budgeted for FY 2004 in the amount of $230,000 for the Inland Waterways Users Board activity. Section 302 of WRDA 86 created this eleven-member advisory board of

inland waterway users and shippers to make recommendations to the Secretary of the Army and the Congress regarding construction and rehabilitation priorities and spending levels for commercial waterway improvements. The Board members were initially appointed in late Spring of 1987. The Board has held forty-three meetings since it was created. The Board's recommendations are a valuable addition to our program and budget development process. We appreciate the contribution of the Board's chairman and its members to the efficient management and modernization of our inland waterways. We believe the Board provides an important advisory function to both the Secretary of the Army and the Congress.

SHORELINE EROSION CONTROL DEVELOPMENT AND DEMONSTRATION PROGRAM

The FY 2004 Budget includes $6,000,000 to plan, design, construct, and monitor projects to demonstrate and evaluate new shoreline protection technologies. To date, over $10,000,000 has been used to develop program goals, establish criteria for selecting technologies and techniques to be tested, select sites and initiate construction of the first demonstration site at Cape May Point, New Jersey. The techniques developed under this program are expected to yield up to $150,000,000 of savings in future budgets by reducing erosion and/or lengthening the time between renourishments.

DAM SAFETY AND SEEPAGE/STABILITY CORRECTION PROGRAM

Funds are budgeted for FY 2004 in the amount of $8 million to continue ongoing Dam Safety and Seepage/Stability projects that were approved prior to FY 2004. This is an increase of $3 million from the FY 2003 budget. The Dam Safety and Seepage/Stability Correction Program provides for modification of completed Corps of Engineers dam projects. While no Corps dams are in imminent danger of failure, some may have a higher dam-safety risk than originally anticipated based on new data or the likelihood of extremely large floods and seismic events. Seepage problems at Corp' dams are usually related to increased reservoir levels above the previous pool of record at a project. Static instability generally involves movement that starts at a slow rate and could result in massive displacement of large volumes of material if not corrected. Dam modification work is proceeding under existing authorities on projects where cost-effective risk reduction measures have been identified and approved.

AQUATIC PLANT CONTROL PROGRAM

The FY 2004 budget includes funds in the amount of $3 million for the Aquatic Plant Control Program authorized by Section 104 of the Rivers and Harbors Act of 1958, as amended.

This is the same as the FY 2003 budget. These funds will be used to continue research efforts for aquatic plant control technologies to support operation and maintenance of Corps Water Resources projects. Primary research efforts are focused on the non-indigenous submersed species, hydrilla and Eurasian watermilfoil, with emphasis on development of biological control agents.

DREDGED MATERIAL DISPOSAL FACILITIES PROGRAM

Funds in the amount of $7 million are budgeted for FY 2004 for ongoing projects in the Dredged Material Disposal Facilities Program. This is a decrease of $2 million from the FY 2003 budget. Section 101 of WRDA 86, as amended by Section 201 of WRDA 96, established consistent cost sharing for construction of dredged material disposal facilities associated with Federal navigation projects, including disposal facilities for Federal project maintenance. These funds will be used for the Federal share of construction of applicable dredged material disposal facilities required for maintenance of existing projects or fee payments to private entities for the use of privately owned dredged material disposal facilities if such a facility is the least cost alternative to dispose of dredged material. All Federal costs for dredged material disposal facilities associated with project maintenance will be financed from the Harbor Maintenance Trust Fund.

EMPLOYEES' COMPENSATION

The FY 2004 budget includes $19.13 million for transfer to the Department of Labor to repay the Employees' Compensation Fund for costs charged during the period July 1, 2000 through June 30, 2002 and for investigation of fraudulent claims for workers compensation benefits. This is a decrease from the FY 2003 budget. The transfer to the Department of Labor is for payment of benefits and claims due to injury or death of persons under the jurisdiction of the Corps of Engineers civil functions.

ACTIVITIES UNDER THE OPERATION AND MAINTENANCE, GENERAL (O&M) APPROPRIATION

AQUATIC NUISANCE CONTROL RESEARCH
(Formerly Zebra Mussel Research Program)

The Corps FY 2004 Operation and Maintenance, General, appropriation budget includes $725,000 for the Aquatic Nuisance Control Research Program which is a redefinition of the previously funded Zebra Mussel Research Program (ZMRP). The program now addresses all invasive species except for aquatic plants. Invasive species cost the public over $137 billion

annually. Authorized by the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (PL 101-646) this effort includes the only Federally funded R&D program directed at control of zebra mussels and their effects on public facilities. The development of strategies to apply control methods involves engineering design, operations, and maintenance of facilities and structures. Control strategies are being developed for (a) navigation structures; (b) hydropower and other utilities; (c) vessels and dredges; and (d) water treatment, irrigation, and other control structures.

Proposed activities for FY 2004 include expansion of as many as possible of the technologies developed under the ZMRP to address all invasive species. This will include continued research efforts to examine a number of different technologies other than pulse power to eradicate zebra mussels from structures and research on new coatings to evaluate their ability to stop the settlement of zebra mussels and other invasive species on various surfaces. Research efforts will examine how current ballast water regulations can be modified to reduce the potential for introductions of aquatic nuisance species and the Aquatic Nuisance Species Information System will be expanded into a WEB-based system, and invasive species engineering guides will be incorporated into the system. The mechanisms that allow invasive species to disperse through the nation's waterways will continue to be examined or determined. Investigations will also be conducted to identify proactive procedures that will assist in limiting new distributions. Scientists will visit projects where mosquitoes are a problem to develop abatement programs and meet with local community representatives to discus control technologies.

In cooperation with state and Federal agencies, scientists will investigate methods to control invasion and of snakehead fish in Corps Reservoirs and eradication methods once they are there. In addition, a comprehensive database will be developed on zebra mussel densities, molluscivore (fish that consume mussels) densities and growth, water quality, and other pertinent habitat attributes. Information from database will be used to construct models to predict the effects of molluscivores on zebra mussel infestations and subsequent changes in habitat quality. These models will quantify the beneficial aspects of predation on zebra mussels, assist in impact prediction, and aid in allocation of control efforts, and the formulation of control strategies.

AUTOMATED BUDGET SYSTEM

The Civil Works Operation and Maintenance Automated Budget System (ABS), is an automated system used to enable Districts and Divisions to prepare, review and submit their Operations And Maintenance programs consistent with policy guidelines and priorities. The program is continuously evaluated for effectiveness to identify areas that require change in order to meet the needs of the overall Civil Works Operations and Maintenance program. It provides

extraction of standard reports to support Division and Headquarters review and development of the Civil Works O&M program recommendation. ABS reports provide cost breakouts by business process, benefit codes, states, field units, navigation fee codes, joint cost percentages and numerous other groupings to support analysis, distribution, updates and performance monitoring. This system is available to all managers at all Corps of Engineer levels who have Operation and Maintenance management responsibilities. The FY 2004 Budget includes $285,000 for this item.

COASTAL INLETS RESEARCH PROGRAM

The FY 2004 budget includes $2.75 million to fund the Coastal Inlets Research Program to increase Corps capabilities to cost-effectively design and maintain the over 150 inlet projects, which comprise the bulk of coastal O&M expenditures. Because of their complex nature, the behavior of inlets is poorly understood. This has resulted in the Corps spending a large portion of its O&M allocations to maintain inlet projects. The Coastal Inlets Research Program studies functional aspects of inlets such as their short- and long-term behavior and their response to waves, tides, currents, and engineering modifications, given their regional geologic and oceanographic setting. As inlet behavior and the consequences of navigation projects are becoming better understood, sophisticated tools for management of inlets for navigation projects, such as models and empirical relationships, are becoming available. These new tools are leading to more efficient, cost-effective designs that have been shown to reduce O&M requirements and, consequently, costs.

With our FY 2004 allocations for this program we will begin a major R&D effort to implement state-of-the art predictive formulas for sediment transport under waves and currents based on models developed previously in this program; collect data and validate the Inlet Modeling System, scour model, and morphology change models at deep-draft channels and collect data and model channel and bypassing processes at sites of opportunity in collaboration with Corps Districts; perform physical and numerical modeling studies on innovative jetty and channel-control designs to reduce dredging costs, improve bypassing, and improve navigation reliability at inlet entrance channels; begin creation of web-based Navigation Channel Resource Center to house data on inlet channel surveys, performance, and dredging which will serve as a resource for all analytical work in the Coastal Inlets Research Program and provide the Corps with a central location for channel data; continue adding to the inlets database encompassing all Federally maintained and major non-federal inlets; extend the long-term morphology modeling system newly developed in the Coastal Inlets Research Program to include the adjacent beaches, navigation channel, and flood shoal together with the ebb shoal and validate and release the model to the public; acquire field data at inlet jetties to understand the beach and jetty interaction

through rip currents, developing a quantitative predictive method for rip current sediment transport and; develop educational materials about coastal processes, inlet processes, and dredging for the public and schools at all levels.

CULTURAL RESOURCES (NAGPRA/CURATION)

The FY 2004 budget includes $1.545 million to fund the Cultural Resources (NAGPRA/Curation) Program. Enacted on 16 November 1990, the Native American Graves Protection and Repatriation Act (NAGPRA) is a complex act that addresses the recovery, treatment, and repatriation of Native American and Native Hawaiian cultural items by Federal agencies and museums. As defined by the Act, cultural items are human remains, associated funerary objects, unassociated funerary objects, sacred objects, and objects of cultural patrimony. In FY 1994, the Corps of Engineers began the process of inventorying human remains and associated funerary objects and completing summaries as mandated by the legislation. In addition, the Corps is responsible for curation of cultural resource materials collected from its flood control projects. These collections are extensive and are located at a variety of curation facilities across the Nation. The costs of the program are to accomplish NAGPRA work and to fund centralized curation support to the districts. Curation of these materials, which have the largest volume among all federal agencies responsible for this activity, is required by a number of public laws.

In FY 2004 the Corps will continue the process of inventorying Native American and Native Hawaiian human remains and associated funerary objects and complete summaries of unassociated funerary objects, sacred objects, and objects of cultural patrimony as mandated by the legislation. Information will be made available to interested individuals and groups through notices in the Federal Register. Districts will continue to be engaged in formal consultation with tribes and organizations for the legislated purpose of repatriating cultural objects for which there are legitimate claims. We will continue in the pivotal role of assisting in the development and implementation of an agency-wide, long-term plan for the curation of Corps archeological collections (heritage assets). We will continue to fulfill our charter activities to include an inventory of all DoD and Corps heritage assets and participate in the development of standards and guidelines for archeological collection rehabilitation. Work will continue on the development and implementation of final guidelines and procedures for field collection of archeological materials and the long-term treatment of those collections. Finally, leadership will be provided in the development of a training curriculum on the treatment of heritage assets and working in consultation with all stakeholders, take initial steps to make this training available to appropriate managers and decision makers.

DREDGE WHEELER READY RESERVE

The FY 2004 budget includes $8 million to cover the cost of keeping the dredge WHEELER fully operational in FY 2003 while in Ready Reserve status in accordance with Section 237 of the Water Resources Development Act of 1996 (WRDA 96). Section 237 contains a provision requiring the Corps hopper dredge to be placed in a ready reserve status. The section requires that no individual project funds may be used to fund the dredge in its ready reserve status unless the dredge is specifically used in conjunction with a project. In FY 1998, the WHEELER was placed in a ready reserve status as required by WRDA 96. The hopper dredge WHEELER, in a ready reserve status, is required to be able to perform emergency dredging work, but may not be assigned any scheduled hopper dredging work. The dredge may be placed in an active status in order to perform work that private industry fails to submit a responsive or responsible bid for advertised dredging, or where industry has failed to perform under an existing contract. In light of this criteria, the WHEELER is being kept at the dock, with sufficient crew to respond to any unforeseen requirement within 72 hours, and be able to work for approximately 3 weeks. The dredge is being maintained in a fully operational state and periodically will perform routine dredging operations to test equipment and keep the crew trained and prepared. In all but one year since put into ready reserve, the WHEELER was called out of ready reserve status to perform urgent dredging to assist industry dredges in restoring navigation channels and waterways.

DREDGING DATA AND LOCK PERFORMANCE MONITORING SYSTEM

The Dredging Data and Lock Performance Monitoring System budget of $1.18 million supports a continuing nationwide collection and analysis program of dredging data essential for the Corps efficient and effective management of the nation's deep and shallow draft navigation projects. These efforts are necessary to provide data for efficient management of Congressionally authorized navigation projects, as well as to respond to specific public laws, including P.L. 96-269 (Minimum Dredge Fleet) and P.L. 100-656 (Small Business Set-Aside).

Data include dredging costs and quantities, equipment used, and disposal site documentation. This data facilitates nationwide and regional analysis and management for Corps performed and contracted dredging for both channel deepening and maintenance categories of work. The program also supports assessments on the technological changes of vessels within the world fleet, which is necessary for estimating the nation's future maintenance dredging requirements. Up-to-date information on world fleets, commodity flows, vessel routing through Corps channels and assessment of underkeel clearances all contribute to the identification of

U.S. channels with the greatest safety and piloting problems. The lock monitoring provides managers at 230 lock sites and their regional and national offices with nationally consistent operational and management data. Collectively, these data systems support continuing evaluation of local conditions and performance measures throughout the navigation system and, in-turn, facilitate nationwide control and critical management decisions. These data are critical for effectively monitoring and executing the overall navigation program.

DREDGING OPERATIONS AND ENVIRONMENTAL RESEARCH PROGRAM (DOER)

The FY 2004 budget includes $6.755 million for the Dredging Operations and Environmental Research Program (Doer). The DOER program is an extremely important effort that combines engineering, operational and environmental components of waterway management to address issues impacting our ability to maintain a safe, reliable, environmentally sustainable, and economically efficient navigation system. The DOER Program is an integral and highly beneficial component of the Corps navigation dredging and environmental protection missions. Dredging and disposal must be accomplished within a climate of increased dredging workload, fewer placement sites, environmental constraints, and decreasing fiscal and manpower resources. Balancing environmental protection with critical economic needs while accomplishing dredging activities is a major challenge. Major features of DOER include, innovative technologies research, environmental resource protection, dredged material management, and (4) risk research.

As part of these features in FY 2004, the DOER program will; (1) Transfer technology to a wide body of stakeholders that addresses operational, economic, and environmental components of the Corps dredging program in full coordination and cooperation with other appropriate agencies and offices such as: Environmental Protection Agency, National Marine Fisheries Service, US Fish and Wildlife Service, American Association of Port Authorities (AAPA) and state natural resource managers. Aggressive technology transfer through multiple media and rapid technology application ensures that research products are integrated into decision making at Corps projects and made available to port authorities and other navigation project stakeholders.; (2) Identify, evaluate and develop innovative tools, databases and software, equipment, and technology to improve the design, operation, and management of Corps maintained navigation projects. It will address problematic environmental resource issues, such as environmental windows or threatened and endangered species, using a combination of innovative engineering and scientific approaches; (3) Develop dredged material handling, transport, and placement options which are operationally efficient, environmentally sound and cost effective and; (4) Apply a comparative risk-based framework in the assessment and management of contaminated

dredged material and to develop logical decision support tools that quantify uncertainty and facilitate efficient decision making

DREDGING OPERATIONS TECHNICAL SUPPORT (DOTS) PROGRAM

The FY 2004 budget includes $1.545 million for continuation of the Dredging Operations Technical Support (DOTS) Program. The DOTS program fosters the one-door-to-the-Corps concept through providing comprehensive and interdisciplinary technology transfer, technology application, and necessary engineering, operational and environmental training of all stakeholders for all Corps navigation dredging projects. DOTS houses the Corps' technology and information database and is managed from a centralized program to maximize cost effectiveness and implement National policies, laws, and complex technical requirements on a consistent basis. The DOTS is fully accessible through the Internet and has received thousands of visits from navigation stakeholders. The DOTS Program is a storehouse focusing on application of state-of-the-art technology and research results to field problems. Emerging scientific approaches sometimes cause uncertainty in administration of the Corps navigation dredging program. As such, DOTS provides a consistent technology base and ready response, and training on technical issues through a readily accessible technology transfer capability and generic technology application to other projects with similar problems. Short-term work efforts to solve generic Corps-wide technical problems for maintaining navigable waterways are major features of the DOTS Program. Technology transfer of new and emerging techniques for application at Corps and stakeholder navigation maintenance projects is an important DOTS activity. In response to new research results and continuing staff reductions the DOTS program will continue to expand to provide technology transfer to all O&M navigation projects and be fully responsive to stakeholder needs.

Special emphasis is placed on transfer of technology developed by the Corps and others to include proven international technology that deal with maintenance and management of navigation structures and navigable waterways. Typical technology transfer and training includes management of contaminated dredged material, application of innovative risk-based technologies to contaminated dredged material, maintenance of coastal inlets and adjacent shorelines, shoreline stabilization and river training activities, assessment and management protocols for beneficial uses of dredged material, channel realignments, protection of endangered species, equipment selection, rational application of dredging windows, lock and dam maintenance needs, channel and harbor maintenance activities and ship simulation activities.

A key feature of the program includes effective annual face-to-face and internet on-line training of Corps staff, navigation stakeholders, and others who have regulatory authority over

Corps navigation maintenance activities on the latest environmental and engineering techniques associated with maintaining navigable waterways. The program also supports joint Corps and United States Environmental Protection Agency activities dealing with environmental aspects of the national navigation program.

EARTHQUAKE HAZARDS REDUCTION PROGRAM FOR BUILDINGS AND LIFELINES

The Earthquake Hazards Reduction Program is included in the FY 2004 budget in the amount of $300,000 to respond to the requirements of Public Law 101-614, National Earthquake Hazards Reduction Program (NEHRP) and Executive Order (EO) 12941, Seismic Safety of Existing Federal Buildings. The objective of PL 101-614 is to establish and initiate for buildings and lifelines a systematic approach to reducing loss of life, injuries, and economic costs resulting from earthquakes in the United States. The EO directs all Federal departments and agencies to develop an inventory of their owned and leased buildings and an estimate of the cost of mitigating unacceptable seismic risks in their buildings. Lifelines are defined as public works and utility systems.

We are legally responsible to develop a plan to mitigate these vulnerabilities. In addition, FEMA is pursuing the possibility of requiring agencies to develop mitigation plans for their deficient buildings. The funds requested will be used to help finalize the details of the Corps mitigation plan and provide the tools for implementation of the program, provide assistance to districts in the development of mitigation concepts and designs, provide support to Corps Headquarters in oversight and management of the mitigation program, provide technical support to Corps HQ, maintain technical seismic expertise, develop guidance for additional lifeline systems not previously covered in commercially available standards or existing Corps guidance, develop guidance for operations personnel, develop a mitigation plan for the Corps lifelines, and update and maintain the database. The development and updating of guidance for the seismic evaluation and risk mitigation of lifeline facilities will continue as well.

FACILITY PROTECTON

On 11 September 2001, our nation suffered a loss of unimaginable proportions, with terror attacks in New York, Washington and the skies over rural Pennsylvania. These events have emphasized the resolve of terrorists to weaken our nation by inflicting massive casualties and destroying vital elements of our infrastructure. The scope of Corps of Engineers water resources assets considered highly vulnerable to future terrorist attacks include 75 hydroelectric power projects, 383 major lakes and reservoirs with 376 million annual visitors, 8,500 miles of

levees, 276 locks, 4,340 recreation areas, 11.7 million acres of public land, 25,000 miles of commercially navigational channels, 926 shallow and deep draft harbors, and $1.2 billion in research and development facilities.

In response to the attacks of September 11, 2001, the Corps compiled a list of critical public assets in accordance with Presidential Decision Directive number 63. In 2001, the Corps initiated vulnerability assessments (RAM-D) of critical water resources infrastructure to determine vulnerability to terrorist attacks. A clear need exists for improved security and protection at vital Corps water resources and administrative facilities supporting our missions. The protection of Corps critical infrastructures incorporates the elements of detection, protection, and response. The Corps is addressing these elements by increasing surveillance and awareness and initiating crime watch programs, continuing implementation of protection measures and coordinating the response by local law enforcement support and local guard forces. The assessments of Corps facilities have identified key research areas, including waterborne threats, rapid recovery and emergency response, vulnerability and damage assessment tools, structural hardening.

The Corps will complete implementation of facility protection standards at Mississippi River and Tributaries facilities, and will continue Force Protection Standards for Corps Offices, interfacing with other Federal, state and local government offices and private industry, and will continue ongoing research efforts funded in FY 2004. This work, in addition to $91 million of work on other projects specified in the Operation and Maintenance account, amounts to $104 million.

The FY 2004 budget includes $13 million to continue the Corps of Engineers Civil Works Facility Protection effort, including continuation of existing security levels and maintaining guard positions and electronic monitoring systems at critical facilities.

GREAT LAKES SEDIMENT TRANSPORT MODELING

The Great Lakes Sediment Transport Modeling Program is included in the FY 2004 budget in the amount of $1.0 million. Section 516(e) of the Water Resources Development Act of 1996 authorizes development of sediment transport models for tributaries to the Great Lakes that discharge to Federal navigation channels or Areas of Concern (AOCs). The Great Lakes Sediment Transport Modeling program is intended to use sediment transport models to target areas for preventive measures to control sediment movement to navigation projects and AOCs. These models are being developed to assist state and local resource agencies evaluating alternatives for soil conservation and nonpoint source pollution prevention in the tributary watersheds. The ultimate goal is to support state and local measures that will reduce the loading

of sediments and pollutants to navigation channels and AOCs, and thereby reduce the costs for navigation maintenance and sediment remediation.

FY 2004 funds will be used to complete development of models at four tributaries (Genesee River, New York; Black River, Ohio; St Joseph River, Michigan; and, Burns Waterway, Indiana), initiate model development at four tributaries (St. Louis River, Minnesota/Wisconsin; Oswego River, New York; Cuyahoga River, Ohio, and; River Raisin, Michigan), and conduct scoping and coordination for future model development at the next set of priority tributaries (Eighteen Mile Creek, New York; East River, Wisconsin; Grand River, Michigan; Sandusky River, Ohio). State and local partners will use models developed under this program to reduce loadings of sediments and contaminants to Great Lakes tributaries, thereby reducing future dredging requirements at Federal navigation channels and promoting the restoration of beneficial uses at Great Lakes Areas of Concern.

HARBOR MAINTENANCE FEE DATA COLLECTION

Public Law 103-182 authorizes up to $5 million to be used annually for the administration of the Harbor Maintenance Trust Fund. The Corps FY 2004 budget includes $675,000 for this activity. The Corps is required to collect data on domestic and foreign shippers of waterborne commerce subject to the Harbor Maintenance Tax (HMT) and provide it to Customs for enforcement. Analysis of HMT revenues and transfers is required to validate the adequacy of the HMTF in light of the uncertainty over the legal and international challenges to the HMT, and to document the operation of the trust fund in the *Annual Report to Congress*. Analysis of waterborne commerce shipments and vessel movement data is also needed to respond to legal questions to the HMT; to analyze alternative funding options; and to assess the economic and competitiveness impacts of other potential funding sources. Therefore the Corps requires a portion of the administrative funding. The recent transfer of the Foreign Waterborne Transportation Statistics Program to the Corps requires the data processing system to be expanded to include validation of users engaged in foreign trade, in addition to domestic users. The budgeted amount will be needed in FY 2004 to operate and enhance the system to analyze, enforce, collect and validate harbor usage information required by the Customs Service for auditing HMT collections.

INLAND WATERWAY NAVIGATION CHARTS

The FY 2004 Budget includes $4,120,000 for Inland Waterway Navigation Charts. In 1994, a barge on the inland water struck a bridge pier in poor visibility caused an AMTRAK derailment accident near Mobile, Alabama. Consequently, the National Transportation Safety

Board recommended that the Chief of Engineers begin to promote use of electronic charts for safety of navigation on inland waterways. The first part of that recommendation was to extend the coastal Differential Global Positioning System (DGPS) into the inland waterways. That work is now about 90 percent complete. The second part is this effort to provide accurate and current electronic navigation chart (ENC) data necessary to allow the commercial system to be used to improve safety and efficiency. The American Waterway Operators have also stated a need for consistent Corps channel data for inland waterway electronic charts, and the recent Marine Transportation System study recommended that electronic chart coverage be extended into inland waterways and the addition of hydrographic survey information. National Oceanographic Atmospheric Administration (NOAA) is also developing ENC products for their coastal charts, which require use of source data – including Corps channel information. The Water Resources Development Act, 2000, Section 558, requires Corps of Engineers districts to provide digital hydrographic survey data to the NOAA in an agreed upon format not later than 60 days after completion of a survey. The U.S. Coast Guard also has plans for implementation of vessel traffic systems (VTS) in New Orleans and other areas and merging of its Aids to Navigation into the ENC datasets provided by other federal agencies such as the Corps and NOAA is necessary. VTS data could be extremely useful to vessels using the waterway, although an electronic chart is needed for display of the information.

This effort provides ENC for all inland waterways and other federal navigation channels maintained by the Corps of Engineers to be used by commercial Electronic Chart Systems (ECS), which, when combined with the existing DGPS, will improve the safety and efficiency of marine navigation in both inland and coastal waterways of the United States. On inland waterways, the Corps will collect more accurate survey and mapping data than is currently on its paper charts. Accuracies of about 2 meters are necessary to match the positional accuracy of the DGPS signal, which when combined in the commercial ECS will greatly improve the safety and efficiency of navigation. This will allow safe navigation through bridge openings during fog and other bad weather conditions as well as during heavy traffic situations.

As part of this program, the Corps coordinated standards and requirements with the National Oceanic and Atmospheric Administration (NOAA), U.S. Coast Guard, American Waterway Operators (AWO), the Inland Waterways User Board (IWUB); developed initial IENCs for most of the Mississippi River, and all of the Ohio, Black Warrior, Tombigbee, and Red Rivers; developed the plans, procedures and guidelines necessary for standardization of inland waterway chart data products; developed the internet web site for data dissemination; began new highly accurate baseline surveys on the inland waterways of features needed in the IENC data; and began coastal product development in two districts.

The Corps will continue coordination of standards and requirements with the National Oceanic and Atmospheric Administration (NOAA), U.S. Coast Guard, American Waterway Operators (AWO), and the Inland Waterways Users Board (IWUB); complete IENCs for most of the Mississippi River and all of the Ohio, Black Warrior, Tombigbee, and Red Rivers; begin update program for completed IENCs; complete coastal product development in two districts and begin development in new districts; and continue baseline surveys of waterway features.

LONG TERM OPTION ASSESSEMENT FOR LOW USE NAVIGATION

Operation and Maintenance funds for navigation are increasingly constrained, necessitating project prioritization and the consideration of long-term management strategies. The Budget continues to give priority to maintaining inland waterway segments and coastal harbors that have utilization, while also funding the operation and maintenance of shallow draft harbors that support commercial or subsistence fishing or Federal government activities. This study will identify data needs and methodologies to assess lower use inland waterways and harbors, examine the level of continued Federal interest in these projects, and provide an assessment of possible long-term management options for projects with diminishing NED benefits. Such options will include transfer to another public or private entity, privatization, divestiture, and alternate O&M funding mechanisms.

MONITORING OF COMPLETED NAVIGATION PROJECTS

The FY 2004 budget includes $1.750 million for the Monitoring of Completed Navigation Projects (MCNP). This continuing program monitors project performance, evaluates the performance against pre-construction projections, and transfers the lessons learned into guidance for Districts. Sediment transport patterns, water depths, currents, waves, flushing characteristics, tidal stages, and other hydrodynamic phenomena together with associated environmental impacts are changed by the construction of navigation projects. Information gained from monitoring navigation projects, including the magnitude and rate of these changes, is required to verify design expectations, determine benefits, and evaluate operational and maintenance efficiencies. Information collected from monitored navigation projects will be used by the local Districts to improve project performance. Additionally, this information will be collected and analyzed on a national basis to document successful designs, disseminate lessons learned on projects with problems, and provide upgraded field guidance that will help reduce life-cycle costs on a national scale.

NATIONAL DAM SAFETY PROGRAM (NDSP)

The National Dam Safety Program Act (Public Law 92-367 as amended) designates FEMA as lead agency in all efforts to enhance national dam safety. The National Dam Safety Program is coordinated through the Interagency Committee of Dam Safety (ICODS). The Chief, Engineering Division, Directorate of Civil Works, represents the Department of Defense as a member of ICODS. The Corps and FEMA signed a Memorandum of Understanding for the purpose of establishing responsibilities for management and administration assistance in the implementation of the National Dam Safety Program. FEMA acting through ICODS will provide support in development of Federal guidelines for dam safety, promotion of public awareness programs, publications, training materials, the National Performance of Dams Program, and workshops. The budget includes $45,000 to continue this participation in FY 2004.

NATIONAL DAM SECURITY PROGRAM

The budget includes $30,000 for the National Dam Security program in FY 2004. The Interagency Committee on Dam Safety (ICODS) has recognized terrorism as one of the major threats to dams in the United States. Of all the agency members of ICODS, the Department of Defense acting through the Corps has the most unique and in depth knowledge in the area of antiterrorism program development and execution. This program uses the Army's experience in antiterrorism planning and building design as the basis for developing a program for safeguarding Corps dams and for export to the other Federal agencies through ICODS. Training under this program is designed for the dam operator and field manager in order to improve their awareness of the potential threat and to establish lines of communications to minimize damage if and when a threat is received. The program also provides for the exchange of information on threats received and the establishment of a database to review trends in the pattern of threats. The Corps and other Federal agencies established a task group to study the extent of the problem of internal terrorism against dams and other natural resource facilities and to determine the proper level of security awareness required for these facilities.

NATIONAL EMERGENCY PREPAREDNESS PROGRAM (NEPP)

The FY 2004 budget of $6 million will enable the Corps of Engineers to be prepared to accomplish its continuity of operations and continuity of government responsibilities during national/regional crises. This entails support of civil government through coordinated execution of federal agency plans and the planning/conducting of exercises to test readiness to provide such support. This includes responsibility for development of comprehensive national level

preparedness plans and guidance for response to all regional/national emergencies, whether caused by natural phenomena or acts of man, plans for response(s) to acts of terrorism, and the local preparedness necessary to support Corps continuity of operations. The Corps provides engineering and construction support to state and local governments in response to catastrophic natural/technological disasters. Rapid response to disasters of a regional/national magnitude requires that extensive pre-emergency planning and preparedness activities be conducted to assure the availability of a work force capable of shifting from routine missions to crisis operations and the organizational command and control structure(s) necessary to provide a coordinated and comprehensive response in the critical early stages of a catastrophic disaster.

The FY 2004 program will provide for continuing the implementation of the National Emergency Preparedness Program. The FY 2004 program will continue the process of catastrophic disaster planning and exercising to enable the Corps to rapidly respond to a broad spectrum of emergencies, with emphasis on natural disaster and terrorists events that have regional and national implications. An effort will be made to satisfy increasing demands on the program to support multi-agency (Federal, state, and local government) requests to exercise plans focusing on regional catastrophic natural and man made disasters. Increasingly, Federal, state and local agencies are looking to the Corps to take the lead in this area

NATIONAL LEWIS AND CLARK COMMEMORATION COORDINATOR

With a FY 2004 Budget of $310,000, we plan to continue coordination of all Corps of Engineer activities relating to Lewis and Clark Commemoration. The bicentennial commemoration of the Lewis and Clark Expedition will begin in 2003 and will continue through 2006. A National Bicentennial Council has been established, and Federal, State, Tribal, and local governmental entities are planning the roles they will play in the commemoration. By virtue of its role as administrator of large stretches of public land along the trail route and of the Army heritage of exploring and mapping of the western United States, the Corps will play a significant leadership role in the observance of the Bicentennial. The nature of this event will involve large numbers of the public traveling through numerous Corps local jurisdictions. The Lewis and Clark Coordinator is responsible for ensuring consistent agency wide information on safety, traversing navigation structures (locks), historic facts, and the geographic location of the Expedition's route. The Coordinator is also responsible for a consistent agency position in coordination activities with the large number of states, local communities and tribes planning local events either on or in close proximity to Corps projects.

These funds with provide the means to develop partnerships, maintain contacts (BIA and Tribal government designees, State Governor’s committees, state recreation and tourism

departments, improve facilities and interpretation and to implement plans for Bicentennial activities by coordinating with commercial entities and volunteer efforts.

PERFORMANCE BASED BUDGETING SUPPORT PROGRAM (PBBSP)

The Government Performance and Results Act of 1993 (GPRA) requires that the Corps, implement performance based budgeting for the Civil Works Operation and Maintenance, General Program. The Performance Based Budgeting Support Program (PBBSP) addresses this requirement by seeking new methods for linking performance to annual budget requests and for analyzing the potential economic impact of budget requests on business processes.

With an FY 2004 budget of $815,000, efforts will center on further refinement of corporate performance principles and program and project level performance measures that focus on anticipated performance and output at different levels of funding, in accordance with the revised finance and accounting cost codes that now align with the five O&M business processes - navigation, hydropower, flood damage reduction, recreation and environmental stewardship. These measurements, at different organizational levels, provide the analytical basis to make adjustments in priorities both at the program and project levels concerning efficiency of facilities or services. Comparison of measurements among projects at all levels helps focus management attention on corrections of program or project deficiencies.

PROTECTING, CLEARING AND STRAIGHTENING CHANNELS

Section 3 of the 1945 River and Harbor Act (as amended by Section 915 (g) of the 1986 Water Resources Development Act) provides continuing authority for limited emergency clearing of navigation channels not specifically authorized by Congress. A limit per project is not specified; however, in any given year, a maximum of $1,000,000 may be used nationwide. Work pursuant to this authority is undertaken as emergency measures to clear or remove unreasonable obstructions to navigation in navigable portions of rivers, harbors and other waterways of the U.S., or tributaries thereof, in order to provide existing traffic with immediate and significant benefit. The FY 2004 budget of $50,000 is an estimate based on historical experience. If actual requirements are more than estimated, funds will be reprogrammed to meet demonstrated needs.

RECREATION MANAGEMENT SUPPORT PROGRAM (RMSP)

The FY 2004 budget for the Recreation Management Support Program (RMSP) is $1.545 million. This program supports the Corps recreation business program by funding activities of the Recreation Leadership Advisory Team (RLAT).

The RLAT is composed of representatives from the division, district and project levels of the Corps natural resources management program. It meets on a regular basis and provides input, advice and support to the Corps strategic planning activities for the recreation business program. The RMSP, under the leadership of the RLAT, serves to identify Corps national recreation program priorities and address those priorities through valid management studies, management support, and information transfer.

In FY 2004, the RMSP will study the benefits of recreation, meeting the outdoor recreation needs of various ethnic groups, and customer satisfaction with Corps operated recreation sites and facilities. It will track recreation trends and support various tools to provide information to local managers to assist in operating the recreation program at their projects. Information obtained through RMSP and RLAT activities is critical to the Corps recreation business program strategic planning.

REGIONAL SEDIMENT MANAGEMENT DEMONSTRATION PROGRAM

Authorized by Section 516 of WRDA 96, the Regional Sediment Management Demonstration Program (RSM) is included in our FY 2004 budget amount of $1.545 million. The goal of this program is to demonstrate that, by managing our O&M navigation channel maintenance dredging, construction of shore protection projects and environmental restoration and beneficial uses of dredged material in tandem, we can reduce the total costs of all the projects within a given coastal system and ultimately increase the economic and environmental benefits throughout the nation's coastal navigation system.

Our accomplishments to date include completion of a 3-year RSM demonstration projects with an estimated cost savings of $9.4 Mill at Mobile District. A demonstration at East Pass was completed in FY 02 with collaboration with the United States Air Force. Many more demonstration projects are underway. The cooperation among Federal agencies and the collaboration among the three levels of government have been the greatest accomplishments to date

RELIABILITY MODELS PROGRAM FOR MAJOR REHABILITATION

Our FY 2004 budget includes $675,000 for the Reliability Models Program For Major Rehabilitation. The purpose of this program is to respond to yearly needs of Districts and Divisions, which are preparing Major Rehabilitation reports for the upcoming fiscal year. The objective is to provide reliability models for project features or components that are being

considered for Major Rehabilitation, or to provide procedures to consider the impact of various chemical, environmental or physical processes in a reliability analysis.

The FY 2004 funds will be used to prepare reliability models and collect data for reliability analyses anticipated to be required by several Districts. Reliability models and/or data are anticipated to be needed for the following: Completion of a reliability model for seepage through embankment dams and levees will continue; Completion of a screening level tool for the districts to use to prioritize major rehabilitation and dam safety projects; Evaluation of data collected on performance of dam gates, to determine performance modes and verify load cycles used in reliability analyses, and electrical/mechanical systems model for locks and dams. Provide reliability analysis procedures for selected hydropower equipment. It is also anticipated that two rehabilitation workshops would be conducted. The makeup of these units is subject to the needs of the respective Districts and Divisions.

In prior year, reliability models and other analytical tools have been provided in support of Major Rehabilitation reports on numerous navigation and hydropower projects. In addition, 18 rehabilitation workshops have been conducted in the last 10 years to provide assistance to the Districts as they prepare their reports. These workshops offer guidance in conducting reliability and risk analyses, and provide the opportunity for interdisciplinary teams from the Districts to discuss their particular project with HQUSACE and other Districts personnel.

REMOVAL OF SUNKEN VESSELS

Removal of sunken vessels, or other similar obstructions, is governed by Sections 15, 19, and 20 of the River and Harbor Act of 1899, as amended. Primary responsibility for removal belongs to the owner, operator, or lessee. If the obstruction is a hazard to navigation and removal is not undertaken promptly and diligently, the Corps may obtain a court judgement requiring removal, or remove the wreck and seek reimbursement for the full cost of removal and disposal. Determinations of hazards to navigation and Federal marking and removal actions are coordinated with the Coast Guard in accordance with a memorandum of understanding between the two agencies dated 16 October 1985. Removal procedures are outlined in 33 CFR 245. The FY 2004 budget includes $500,000 for this program. If removal requirements are more than estimated, funds will be reprogrammed to meet actual needs.

WATER OPERATIONS TECHNICAL SUPPORT (WOTS) PROGRAM

The Corps FY 2004 budget includes $725,000 for the Water Operations Technical Support (WOTS) Program. The WOTS Program provides effective environmental and water

quality engineering technology to address a wide range of water resource management problems at Corps reservoir and waterway projects, and in the river systems affected by project operations nationwide. WOTS provides technical support to the Corps' mission related project responsibilities, with special emphasis on the transfer of technology. The program ensures that the technologies developed by the Corps and other Federal agencies are current and readily available to all Corps field offices. The effective use of technologies is secured through rapid direct technical assistance; field demonstrations; specialty workshops; publication of information exchange bulletins, technical notes, executive notes, technical reports, miscellaneous papers, instruction reports, videos, meetings, seminars; and briefings at field offices.

Since its inception in FY 1985, WOTS has provided environmental and water quality technological solutions to over 1,3000 problems identified at projects from every Corps District. The program annually publishes and distributes numerous copies of manuals, bulletins, notes, and reports. WOTS annually conducts specialty workshops, training personnel on the latest environmental and water quality management techniques. In FY 2003, the WOTS program successfully responded to 80 direct technical assistance requests from 31 Corps Districts, conducted six technology demonstration efforts to verify management strategies and techniques, four training workshops on environmental and water quality management techniques, and prepared 12 technical publications for distribution to the field.

WATERBORNE COMMERCE STATISTICS

The Corps of Engineers serves as the Federal Central Collection Agency, and is the sole U.S. Government source, for U.S. domestic and foreign waterborne commerce and vessel statistics in conformance with the River and Harbor Act of 1922 as amended. Activities supporting this national statistics mission include: (a) collecting and reporting of water transportation statistical data; (b) automated systems development and operation, processing, compiling, and publishing statistical data and information on waterborne commerce and vessels moving on the internal U.S. waterways, the Great Lakes, and through all U.S. ocean channels and ports; and (c) compiling and publishing the official U.S. documentation of U.S. vessels engaged in commerce, and their principal trades and zones of operation. The data provide essential information for navigation project investment analyses, including accurate benefit-cost analyses; for annual funding prioritization for operation and maintenance of existing projects; for computation of performance measures; for input into the U.S. National Accounts; and for regulatory and emergency management decisions. The budget includes $4.745 million for FY 2004.

ACTIVITIES UNDER THE REGULATORY PROGRAM APPROPRIATION

For the FY 2004 budget, we have proposed $144 million for the Regulatory Program. I urge the Committee to provide these necessary funds. With the requested funds, the Corps will continue to work toward reducing the average review time for standard permits to 120 days. Standard permits are the most complex and controversial of the Corps permit actions and involve significant aquatic resources and large-scale projects with major economic impacts. Standard permits generally involve intense coordination efforts between the applicant and other federal/state agencies over difficult issues that may include endangered species, historic properties, and water quality issues. While they only account for approximately 5 percent of all permit actions, standard permits demand a enormous resource commitment. Since FY 2001, the average review time for standard permits has increased from 150 days to 160 days. We are working diligently to reduce processing times on these and less complex permit actions to reduce overall processing time. The Corps grants a permit in nearly all cases. The Corps administrative appeals program, gives those applicants who disagree with a Corps permit decision the ability to challenge such a decision without resorting to litigation.

Overall, the Corps is managing its permit workload. Out of 82,000 permit actions, including standard permits, 88 per cent were handled within 60 days in FY 2002. This is largely due to continued emphasis and improvements to the nationwide permit program. In January 2002, the Corps issued revisions to its nationwide permit program. These changes not only increased environmental protection for activities authorized through nationwide permits, but also streamlined the approval process for some activities. Although we are generally maintaining review times for these actions, authorization requirements for nationwide permits are becoming more complex than in the past and many nationwide permits now may involve mitigation. In addition to permit decisions, in FY 2002 the Corps made almost 70,000 jurisdictional determinations, many of these for single-family homeowners. This was an all time high. Many such determinations are not associated with specific permits as the public makes requests to learn if they are subject to federal jurisdiction.

One area we are working to improve is the inspection of completed permit actions and mitigation projects to ensure compliance with permit conditions and mitigation requirements. A 2001 report on wetland losses by the National Research Council of the National Academy of Sciences concluded that the Corps needed to improve its oversight of wetlands compensatory mitigation activities.

In December 2002, the Corps issued a Regulatory Guidance letter (RGL) and initiated implementation of a National Wetlands Mitigation Action Plan. The RGL and mitigation action

plan were developed with the Environmental Protection Agency and other Federal partners. The mitigation action plan complements the RGL and is intended to be complete within three years. It is designed to address outstanding concerns and to improve compensatory mitigation associated with wetland impacts of projects permitted under the Clean Water Act. The RGL and mitigation plan emphasize wetlands functions and a more holistic watershed approach in determining impacts and mitigation.

Additional resources will be devoted to studies of watersheds in sensitive environmental areas. Where comprehensive reviews of individual watersheds can be undertaken, the Corps is better able to manage and predict direct, indirect, and cumulative impacts of proposed projects. This leads to better and more rapid evaluation of future permit applications that will result in expedited permit processing and, in the long-run, potential workload reductions.

As a follow-on to the mitigation plan, the Corps Regulatory Program will be instituting a new database system designed to track additional permit and mitigation statistics, as well as introduce a system for the general public to submit and track permit applications on-line. The system will supplement the Corps program to provide more information to the public through the Internet regarding the Regulatory Program and permit actions. This system has been designed to improve regulatory business processes and will be installed in the first district in August of 2003.

In January 2003, the Corps and EPA issued an advance notice of proposed rulemaking to develop regulations focusing on isolated waters. A 2002 Supreme Court decision (SWANCC) limiting Corps authority in intra-state, non-navigable waters created a need to better clarify Corps jurisdiction in these waters. Both public and Federal uncertainty in wetland policy has resulted in more Corps time being devoted to jurisdictional determinations. Development of policy and jurisdiction definitions will be a substantial work effort that is expected to carry into 2004. It will include public input, data collection, and evaluation by Corps districts, especially those with large areas of isolated waters.

ACTIVITIES UNDER THE FLOOD CONTROL AND COASTAL EMERGENCIES APPROPRIATION

The Corps continues to provide leadership in response to natural disasters and, therefore, must maintain a preparedness program that meets the needs of the Nation. In order to execute an effective FY 2004continued response-planning program and all-hazards preparedness activities in support of the Federal Response Plan, funds in the amount of $70 million are requested.

The Corps responsibility for emergency response requires that its engineering, construction, and emergency operations capabilities be maintained. When a disaster strikes, people's lives, livelihood and property are at stake. Therefore, the level of funding requested is the minimum sufficient to support an organization capable of responding to all natural disasters: hurricanes, floods, earthquakes, and other disasters, such as contaminated public water supplies.

In addition to the preparedness program, the account funds emergency activities in response to natural disasters, as authorized by Public Law 84-99. Since we cannot predict the timing and magnitude of disasters, emergency transfers may be made from other flood control related appropriations amounts and supplemental appropriations will be requested when the need arises.

Activities under this appropriation include: the review and updating of response plans to maintain readiness; training to ensure our capability to respond under adverse circumstances; procurement and pre-positioning of critical equipment and supplies such as sandbags and pumps, which are not likely to be available during initial stages of a response; periodic exercises to test and evaluate plans, personnel and adequacy of training; emergency facilities needed for rapid, effective response to disaster areas; inspection of non-Federal flood control projects to ensure their viability to provide flood protection; emergency operations (flood response and post-flood response); emergency repair and restoration of flood control works which are threatened, damaged or destroyed by flood; emergency protection of existing Federal hurricane and shore protection works; the repair or restoration of Federal hurricane or shore protective structures damaged or destroyed by wind, wave or water action of other than ordinary nature; preventive work performed prior to unusual flooding that poses a threat to life or property; providing emergency supplies of clean water to any locality confronted with a source of contaminated water causing or likely to cause a substantial threat to public health and welfare; and provision of water supplies to drought-distressed areas by reimbursable well drilling or transportation of water at Federal cost.

Work continues on comprehensive interagency response planning activities. These activities support, under the Stafford Act, the Federal Response Plan by providing engineering and construction support following major disasters such as flooding in South Central Texas, and Virginia / West Virginia; Typhoons Chataan and Pongsona in the Western Pacific Ocean; Arizona wildfires; Tropical Storm Isidore, Louisiana; and Hurricane Lili, Louisiana. Mission assignments in support of FEMA's disaster response and recovery activities have included: emergency debris removal; temporary housing; emergency water; restoration of infrastructure; temporary power; construction management; and other support which uses Corps engineering, contracting, and construction expertise.

ACTIVITIES UNDER THE FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)

The Corps has completed remediation at 4 sites, 2 of which were transferred to the Department of Energy for long-term stewardship activities per the 1999 memorandum of understanding between the two agencies, issued 6 records of decision, and completed 6 interim removal actions through the end of FY 2002. The Corps expects to issue 2 records of decision and an Action Memorandum for one new removal action in FY 2003, and issue 6 records of decision in FY 2004 and complete two removal actions. The FUSRAP budget for FY 2004 will fund work at 21 sites in the states of Connecticut, Iowa, Maryland, Massachusetts, Missouri, New Jersey, New York, Ohio and Pennsylvania.

ACTIVITIES UNDER THE GENERAL EXPENSES APPROPRIATION

The General Expenses (GE) appropriation supports the executive direction and management (ED&M) functions of the overall Civil Works program performed by the Corps Headquarters and the regional Division Offices. The primary purpose of the GE account is to provide definitive policy guidance, program management, regional and national interface, and quality assurance and oversight for all Corps activities toward execution of a comprehensive Civil Works program. The Fiscal Year (FY) 2004 budget for the GE account is $171 million, approximately 3.9 percent of the Corps budget. This supports a projected staffing level of 1,095 full time equivalents (FTE).

The FY 2004 program of $171 million consists of approximately 70 percent labor, 10 percent fixed costs such as rent, utilities, communications, and the Plant Replacement and Improvement Program (PRIP) paybacks, 6 percent for such discretionary costs, as travel, training, supplies, and equipment and 12 percent for other Civil Works programmatic type contracts, such as P2/PMBP, Planning Capability Improvement Program, Workforce Planning, implementation of Competitive Sourcing, CFO audit of civil works financial statements, E-government initiative for outgrants and leasing requests, USACE University, Leadership Development and the CWD-IM Support/Information Assurance Program.

In FY 2002, the Corps completed a 5-year draw down of the strength in the GE account. The Corps downsizing efforts reflected reductions realized through focusing on appropriate roles and missions, elimination of duplication of effort, reducing the number of regional division offices from 11 to 8, and continual process reviews to achieve additional savings through efficiencies. Overall, this realized a savings of 256 FTE or a 19 percent reduction. The staffing for the Headquarters will be 420 FTE in FY 2004. This staffing level is the same as FY 2003 and makes up less than 2 percent of the total Civil Works workforce.

In FY 2004, the average size of a division office will be 76 FTE performing ED&M. This is up by one from 75 FTE in FY 2002 due to the civilianization of the Provost Marshall positions. The size of the Pacific Ocean Division office is 20 ED&M FTE based on the size of its Civil Works workload. The regional division offices make up less than 3 percent of the total Civil Works workforce with a staffing level of 553 FTE.

The GE account also funds staffing at the Humphreys Engineer Center Support Activity (HECSA), which provides administrative support to the Headquarters and the Humphreys Engineer Center at Ft. Belvoir; the Institute for Water Resources, which provides water resource support functions, such as conducting and managing national studies, special studies, data collection and distribution, and technical support to other Corps offices on water resource management matters; the Engineer Research and Development Center (ERDC), which provides support to the Coastal Engineering Research Board (CERB); and the Corps of Engineers Financial Center, which provides centralized finance and accounting activities Corps-wide. These activities represent 122 FTE.

PLANT PLACEMENT AND IMPROVEMENT PROGRAM

The FY 2004 Plant Replacement and Improvement Program (PRIP) obligations under the Revolving Fund for items designed to improve productivity, increase efficiency, modernize, improve the Corps equipment and operational capabilities, and increase safety are estimated at $84.1 million. This amount includes estimated FY 2004 obligations of $33.6 million for 13 new major items and $33.4 million for 42 continuing major items. Major items are those assets costing more than $700,000.

SUPPORT FOR OTHERS

In FY 2004, the Corps will provide reimbursable engineering, environmental remediation, construction management, emergency response and other technical support to more than 60 Federal agencies. The estimated dollar value of the Corps efforts is $900 million. The program size depends on several factors: the requesting agency's appropriation (which often is not known until after the fiscal year has begun), the requesting agency’s final decisions on how their program will be executed, and the number, nature and magnitude of national and international emergencies which the Corps will be requested to respond.

CONCLUSION

This concludes the detailed statement of Major General Robert H. Griffin on Remaining Items of the Fiscal Year 2004 Civil Works Budget.